

**REMARKS****INTRODUCTION:**

In accordance with the foregoing, claim 12 has been amended, and claims 15-16 have been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-16 are pending and under consideration. Reconsideration is respectfully requested.

**OBJECTIONS TO THE DRAWINGS:**

In the Office Action, at page 2, the drawing was objected to. The figure has been relabelled ---FIGURE---, and a replacement figure has been submitted herewith. Therefore, the outstanding drawing objection should be resolved.

Reconsideration and withdrawal of the outstanding objections to the drawing are respectfully requested.

In the Office Action, at page 2, the drawing was objected to under 37 CFR 1.83(a).

It is respectfully submitted that the feature "oxidative catalyst filter" is shown in the FIGURE as reference numeral 2, and that a further feature that the oxidative catalyst filter is one of: a metallic honeycomb carrier coated with a catalyst mixture and a non-woven heating mat coated with a catalyst mixture, as recited by claims 3, 7 and 13 is supported by the specification, e.g., in paragraph [0026], wherein it states: "The oxidative catalyst filter of an embodiment of the present invention may be a metallic honeycomb carrier coated with a catalyst mixture or a non-woven heating mat coated with a catalyst mixture." As noted by the court, "The claims are always construed in light of the specification, of which they are a part." See Slimfold Mfg. Co. v. Kinkead Indus. Inc., 810 F.2d 1113, 1118, 1 USPQ2d 1563, 1566 (Fed. Cir. 1987), and also, Network LLC v. Centraal Corp., 58 USPQ2d 1079 (CAFC March 14, 2001).

Hence, it is respectfully submitted that claims 3, 7 and 13 are supported by the FIGURE and the specification under 37 CFR 1.83(a). Thus, the features "honeycomb carrier" and "non-woven heating mat" are submitted to be shown in the FIGURE since these terms are features of the "oxidative catalyst filter," which is indicated by reference numeral 2 in the FIGURE. Hence, the FIGURE is submitted to be in allowable form, and to be a proper basis for claims 3, 7, and 13 under 37 CFR 1.83(a).

**OBJECTION TO CLAIMS:**

In the Office Action, at page 3, claims 12-14 were objected to since claim 12 depends on itself. Claim 12 has been amended to depend from claim 10. Thus, the outstanding objection to claims 12-14 should be resolved.

**REJECTION UNDER 35 U.S.C. §102:**

A. In the Office Action, at pages 3-4, claims 1, 3-5, and 7-11 were rejected under 35 U.S.C. §102(b) as being anticipated by Kurotori et al. (USPN 4,415,533; hereafter, Kurotori). This rejection is traversed and reconsideration is requested.

It should be noted that an oxidative catalyst filter efficiently uses heat from the fixation unit and heating coil according to their arrangement: fixation unit - oxidative catalyst filter - heating coil; or fixation unit - heating coil - oxidative catalyst filter.

The present invention utilizes a combination of a direct combustion method using the heating coil and a catalytic oxidation method using the oxidative catalyst filter, as recited in paragraph [0019] of the specification:

[0019] In the exhaust system, according to an embodiment of the present invention, impurities are easily filtered and deodorized by combination of a direct combustion method using the heating coil and a catalytic oxidation method using the oxidative catalyst filter. At the same time, a heating time for catalytic oxidation is shortened because the oxidative catalyst filter efficiently uses heating sources of the heating coil and the fixation unit, which are adjacent to each other. (emphasis added)

It is respectfully submitted that Kurotori does not disclose igniting the impurities contained in the air, as is recited in independent claim 1, and similarly in independent claims 5 and 9. Thus, Kurotori does not disclose each and every limitation of the claimed invention, and thus, independent claims 1, 5 and 9 are submitted not to be anticipated under 35 U.S.C. §102(b) by Kurotori et al. (USPN 4,415,533).

Since claims 2-4, 6-8, and 10-14 depend from independent claims 1, 5 and 9, respectively, claims 2-4, 6-8, and 10-14 are not anticipated under 35 U.S.C. §102(b) by Kurotori et al. (USPN 4,415,533) for at least the reasons that independent claims 1, 5 and 9 are not anticipated under 35 U.S.C. §102(b) by Kurotori et al. (USPN 4,415,533).

B. In the Office Action, at pages 4-5, claims 1, 2, 4-6, and 8-12 were rejected under 35 U.S.C. §102(b) as being anticipated by Kim (USPN 6,041,201; hereafter, Kim). This rejection is traversed and reconsideration is requested.

The present invention utilizes a combination of a direct combustion method using the heating coil and a catalytic oxidation method using the oxidative catalyst filter, as recited in paragraph [0019] of the specification:

[0019] In the exhaust system, according to an embodiment of the present invention, impurities are easily filtered and deodorized by combination of a direct combustion method using the heating coil and a catalytic oxidation method using the oxidative catalyst filter. At the same time, a heating time for catalytic oxidation is shortened because the oxidative catalyst filter efficiently uses heating sources of the heating coil and the fixation unit, which are adjacent to each other. (emphasis added)

It is respectfully submitted that Kim does not disclose igniting the impurities contained in the air, as is recited in independent claim 1, and similarly in independent claims 5 and 9. In fact, Kim teaches away from utilizing a high heat to combust impurities, as recited in col. 2, line 64 through line 6 of col. 3 of Kim:

The above thermal decomposition is easily generated at a relatively low heating temperature due to a catalytic action of platinum. That is, although the solvent should be generally heated at a high temperature over 400°C. to be decomposed, thermal decomposition is generated at about 200°C. when a platinum catalyst is used. To apply the above thermal decomposition to the conventional carbon filter, the carbon filter would need to be heated to above about 400°C. However, since the carbon filter burns at this temperature, the application of the thermal decomposition is not possible. (emphasis added)

Thus, Kim teaches away from the present claimed invention and does not disclose each and every limitation of the claimed invention. Thus, independent claims 1, 5 and 9 are submitted not to be anticipated under 35 U.S.C. §102(b) by Kim (USPN 6,041,201).

Since claims 2, 4, 6, 8, and 10-12 depend from independent claims 1, 5 and 9, respectively, claims 2, 4, 6, 8, and 10-12 are not anticipated under 35 U.S.C. §102(b) by Kim (USPN 6,041,201) for at least the reasons that independent claims 1, 5 and 9 are not anticipated under 35 U.S.C. §102(b) by Kim (USPN 6,041,201).

#### **REJECTION UNDER 35 U.S.C. §103:**

In the Office Action, at page 6, claims 3, 7, 13, and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kim (USPN 6,041,201; hereafter, Kim) in view of Yamamoto et al. (USPN 6,535,703; hereafter, Yamamoto). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Yamamoto recites in the abstract:

Disclosed is an electrophotographic printing apparatus for printing an image on a print medium with use of a liquid developer which contains a liquid carrier and a toner being dispersed in the liquid carrier. It has an image printing system comprising an imaging

surface on which a toner image is formed from the liquid developer, and transferring the toner image from the imaging surface to the print medium, and an air treatment system having a cleaning member. The cleaning member has a holding member having a plurality of passages in rows, and a particulate material which is capable of absorbing or adsorbing vapor of the liquid carrier and which is held in the passage with room for the particulate material to move in the passages. (emphasis added)

It is respectfully submitted that neither Kim nor Yamamoto disclose utilizing the combination of a direct combustion method using the heating coil and a catalytic oxidation method using the oxidative catalyst filter, as recited in paragraph [0019] of the specification (see recitation above). Thus, independent claims 1, 5 and 9 are submitted to be patentable under 35 U.S.C. §103(a) over Kim (USPN 6,041,201) in view of Yamamoto et al. (USPN 6,535,703), alone or in combination.

Since claims 3, 7, 13 and 14 depend from independent claims 1, 5 and 9, respectively, claims 3, 7, 13 and 14 are submitted to be patentable under 35 U.S.C. §103(a) over Kim (USPN 6,041,201) in view of Yamamoto et al. (USPN 6,535,703), alone or in combination for at least the reasons that independent claims 1, 5 and 9 are submitted to be patentable under 35 U.S.C. §103(a) over Kim (USPN 6,041,201) in view of Yamamoto et al. (USPN 6,535,703), alone or in combination.

#### **NEW CLAIMS:**

New claim 15 recites that the features of the present invention include an exhaust system in an exhaust line of a liquid electrophotography printer, comprising: a direct combustion-catalytic oxidation unit to ignite impurities, filter and deodorize exhaust air; and an exhaust fan to move the exhaust air.

Nothing in the prior art teaches or suggests such. It is submitted that new claim 15 distinguishes over the prior art.

New claim 16 recites the exhaust system according to claim 15, wherein the direct combustion-catalytic oxidation unit comprises: a heating coil to ignite the impurities contained in the exhaust air; and an oxidative catalyst filter to filter and deodorize the exhaust air. Thus, new claim 16 further limits new claim 15, and is submitted to be distinguish over the prior art for at least the reasons that new claim 15 distinguishes over the prior art.

#### **CONCLUSION:**

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for

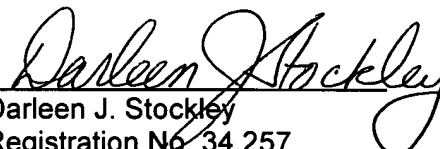
allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: September 2, 2005 By:   
Darleen J. Stockley  
Registration No. 34,257

1201 New York Avenue, N.W.  
Suite 700  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501

**IN THE DRAWING:**

In the Office Action, the Examiner objected to the drawing. In order to overcome this objection, a replacement figure is submitted herewith. The figure has been relabelled --- FIGURE---. Approval of this change to the Drawing is respectfully requested.